

Attachment 5: Build-out Analysis Methodology for Alternative Scenarios

Data Sources

Data for this work was extracted on January 11 and 12, 2006 from the County's Land Management Information System (LMIS). The following data were extracted for all parcels in the study area:

- MCPI (Unique Parcel Identifier Number)
- Primary Zoning
- Planned Land Use
- Parcel Occupancy Code (used to determine use of the parcel)
- Legal Acres
- Noise Contour
- Floodplain (Major and Minor)
- State Use Classification
- Assessments (land and improvements)

Analysis Methodology

The following method was used to determine: 1) whether a parcel was "developable"; and 2) the maximum estimated number of residential units and/or floor area ratio that could be built under the two development scenarios. To determine whether a parcel was "developable," parcels were examined and either removed from the analysis, or their development potential was modified based on the following assumptions:

1. Net buildable acres includes all acreage minus major floodplains, parcels owned by Chantilly Crushed Stone, County owned parcels, and parcels under construction.
2. Parcel by parcel analysis.
3. Parcel considered fully developable if improvements were assessed at less than \$100,000 in 2005.
4. The land use mix for each of the planned land use designations was applied to the total acreage for that category within the segment area.
5. Parcels located 50% or more outside of the study area were removed from the analysis.
6. Segment 4 parcels located within the Transition Policy Area as well as the Shockey Family (CPAM 2004-0022) and Greenvest/Dulles South (CPAM 2004-0021) parcels located in Segments 3 and 4 were removed from the analysis as these parcels are being reviewed in conjunction with CPAM 2005-0003, Comprehensive Plan Amendment for the Upper Broad Run and Upper Foley Transition Subareas. Additionally, staff recommends those parcels located within Segments 3 and 4 that are separated from the Route 50 Task Force segment area by means of the Shockey Family and

Greenvest/Dulles South parcels be included in the CPAM 2005-0003, Comprehensive Plan Amendment for the Upper Broad Run and Upper Foley Transition Subareas (See Attachment 6: Build-out Analysis Map)

7. Additional parcels were included in the build-out analysis adjacent to segment 3 (See Attachment 6: Build-out Analysis Map). These parcels were included in the analysis as they are located in between the Route 50 Task Force Segment Area and CPAM 2005-0003, Comprehensive Plan Amendment for the Upper Broad Run and Upper Foley Transition Subareas.
8. Residential developments approved but unbuilt such as East Gate I and III, Pinebrook, South Riding, Stone Ridge, and Townes of East Gate were included based on the number of dwelling units approved for the subject property. Winsbury Lots subdivision (40 lots) was included in the current potential; however, the property could rezone to a higher density under the Route 50 Task Force recommendations and therefore the acreage of the property was included in Scenario 2.
9. Non-residential developments such as East Gate II, South Riding, South Riding Market Square, Main Street, and Stone Ridge were included based on the square footage approved for the subject property. Arcola Center at Hutchison Farm, ZMAP 1998-0004 (200,000 square feet of office and 811,500 square feet of retail space) was included in the current potential; however, the property is currently seeking a rezoning therefore the acreage of the property was included in Scenario 2.
10. Consideration was not given to parcels that may have private restrictive covenants that limit development as the data was not available.
11. Acreage within the 65 Ldn noise contour was not given a residential component.

12. Scenario 1 (Current Potential):

❑ For Segment 1:

Planned Business: 25% high density residential land uses at 16 dwelling units per acre outside of the 65 Ldn noise contour, 50% employment uses (regional office/light industrial), 10% retail, 10% open space, and 5% civic. Acreages within the 65 Ldn noise contour assumed 75% employment uses (based on Revised General Plan, Regional Office and Light Industrial Land Use Mix).

Planned Industrial and Extractive Industry: 70% industrial land uses, 5% light industrial, 5% regional office, 10% retail, and 10% open space (based on Revised General Plan, General Industrial Land Use Mix).

❑ For Segment 2:

Planned Corridor Retail: 1,000,000 square feet of retail space (includes existing and approved retail uses). Once the 1,000,000 square feet of retail space is realized

assumed 75% employment uses, 10% retail, 10% open space, and 5% civic (based on Retail Plan and Revised General Plan).

Planned Business: 25% high density residential land uses at 16 dwelling units per acre, 50% employment uses, 10% retail, 10% open space, and 5% civic (based on Revised General Plan, Regional Office and Light Industrial Land Use Mix).

□ For Segment 3:

Planned Corridor Retail: 1,000,000 square feet of retail space (includes existing and approved retail uses such as Arcola Center at Hutchison Farm, ZMAP 1998,0004). Once the 1,000,000 square feet of retail space is realized assumed 75% employment uses, 10% retail, 10% open space, and 5% civic (based on Retail Plan and Revised General Plan).

Planned Industrial: 70% industrial land uses, 5% light industrial, 5% regional office, 10% retail, and 10% open space (based on Revised General Plan, General Industrial Land Use Mix). Included 40 residential dwelling units approved with SBPL 2005-0002, Winsbury West.

□ For Segment 4:

Planned Business: 25% high density residential land uses at 16 dwelling units per acre, 50% employment uses, 10% retail, 10% open space, and 5% civic (based on Revised General Plan, Regional Office and Light Industrial Land Use Mix).

13. Scenario 2 (CPAM 2005-0007, Arcola Area/Route 50 CPAM):

□ For Segments 1, 2, and 4:

Planned Business: 25% high density residential land uses at 16 dwelling units per acre outside of the 65 Ldn noise contour, 40% employment uses, 20% retail, 10% open space, and 5% civic. Acreages within the 65 Ldn noise contour assumed 65% employment uses (based on proposed Revised General Plan, Regional Office and Light Industrial Land Use Mix). Scenario 2 assumed retail at 20% however; since increased retail is based on a number of factors the retail development potential may be higher than predicted (Increased retail permitted when specific criteria are met, CPAM 2005-0007, Arcola Area/Route 50, Draft Business Community Policy 2).

□ For Segment 1:

Planned Industrial and Extractive Industry: Same as current potential with the potential for increased retail (Increased retail permitted when specific criteria are met, CPAM 2005-0007, Arcola Area/Route 50, Draft General Industrial Policy 2). As stated above, increased retail was not included in the build-out analysis for Scenario 2.

□ For Segment 2:

Planned Residential (south of Tall Cedars Parkway): 100% residential land uses at 4 dwelling units per acre. Developments expected to provide 30% open space and 10% civic space with residential densities based on the gross acreage of the site (based on Revised General Plan, Residential Land Use Policies).

Hybrid Retail Overlay: Parcels could develop according to Hybrid Retail or Business policies. 25% high density residential land uses at 16 dwelling units per acre, 30% employment uses, 30% retail, 10% open space, and 5% civic.

□ For Segment 3: Planned Business, Village of Arcola, Village Transition Area, and Destination Retail Overlay

Planned Business: 25% high density residential land uses at 16 dwelling units per acre outside of the 65 Ldn noise contour, 40% employment uses, 20% retail, 10% open space, and 5% civic. Acreages within the 65 Ldn noise contour assumed 65% employment uses (based on Revised General Plan, Regional Office and Light Industrial Land Use Mix). Scenario 2 assumed retail at 20% however; since increased retail is based on a number of factors the retail development potential may be higher than predicted (Increased retail permitted when specific criteria are met, CPAM 2005-0007, Arcola Area/Route 50, Draft Business Community Policy 2).

Village of Arcola: Draft policies permit residential densities up to 4 dwelling units per acre (2005-0007, Arcola Area/Route 50, Draft Village of Arcola and Village Perimeter Transition Area, Residential Policy 1). Draft policies also permit residential development outside of the 65 Ldn noise contour above first floor retail or employment uses without being credited against the 4 dwelling units per acre density limit (2005-0007, Arcola Area/Route 50, Draft Village of Arcola and Village Perimeter Transition Area, Retail Development Policy 4 and Residential Policy 3). The analysis assumed three story buildings with second and third story uses for residential purposes (66.6% of the total floor area). A 0.4 FAR was assumed for those areas outside of the 65 Ldn noise contour. The analysis assumed 1,000 square feet per residential unit to determine residential density within the Village boundaries.

Village Perimeter Transition Area: 100% high-density residential land uses at 16 dwelling units per acre for those areas outside of the 65 Ldn noise contour (2005-0007, Arcola Area/Route 50, Draft Village of Arcola and Village Perimeter Transition Area, Residential Policy 1).

Destination Retail Overlay: 100% retail land uses within the 65 Ldn noise contour. Developments expected to provide usable open space with FAR determined based on the gross acreage of the site (based on Retail Plan).

Scenario 2a (As recommended at the May 1, 2006 Planning Commission Worksession):

Assumed 100% high density residential land uses for those areas outside of the 65 Ldn noise contour and adjacent to the Lifestyle hub at 24 dwelling units per acre (Specific criteria must be met in order to develop 100% residential land uses, (2005-0007, Arcola Area/Route 50, Draft Business Community Policy 3 and Lifestyle Hub Policy 2). (See Attachment 3: Permitted Residential Densities Map for those areas adjacent to the lifestyle hub that are permitted to develop with residential uses).

Scenario 2b:

Assumed 100% high density residential land uses for those areas outside of the 65 Ldn noise contour and adjacent to the Lifestyle hub at 16 dwelling units per acre (Specific criteria must be met in order to develop 100% residential land uses, (2005-0007, Arcola Area/Route 50, Draft Business Community Policy 3 and Lifestyle Hub Policy 2).

